

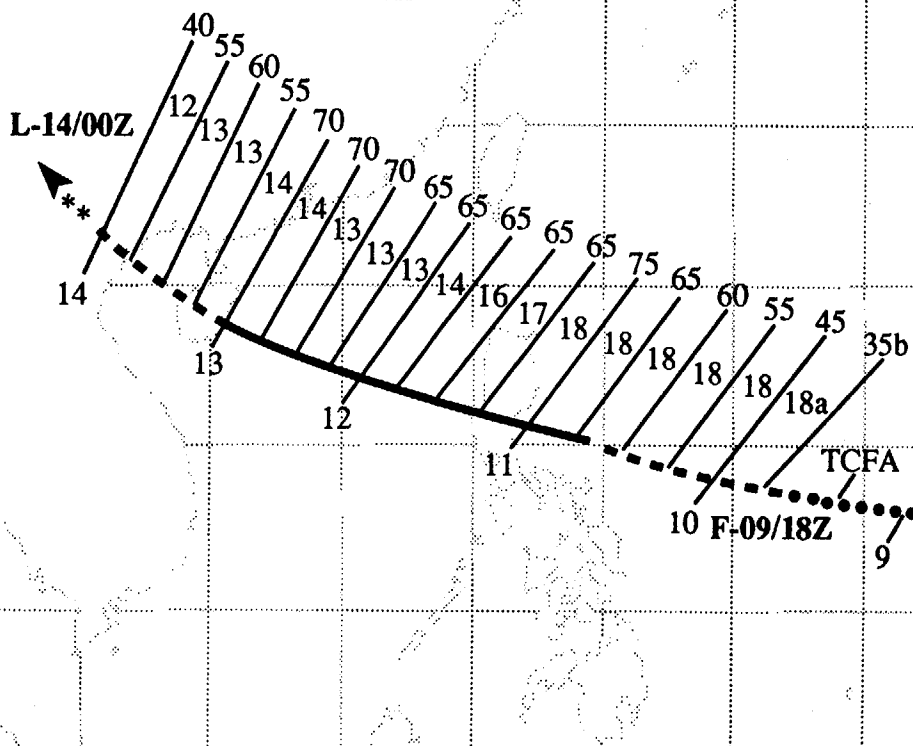
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# **TYPHOON ELI**

BEST TRACK TC-05W  
05 JUL - 14 JUL 92  
MAX SFC WIND 75KT  
MINIMUM SLP 968MB

## **LEGEND**

- △/△ 6-HR BEST TRACK POSITION
- a SPEED OF MOVEMENT (KT)
- b INTENSITY (KT)
- c POSITION AT XX/0000Z
- TROPICAL DISTURBANCE
- TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ◆◆◆ EXTRATROPICAL
- ◆◆◆ SUBTROPICAL
- \*\*\* DISSIPATING STAGE
- F FIRST WARNING ISSUED
- L LAST WARNING ISSUED



EQ

# **TYPHOON ELI (05W)**

## **I. HIGHLIGHTS**

The first significant tropical cyclone to develop in July, Eli formed in the eastern Caroline Islands, intensified into a typhoon while moving rapidly across the Philippine Sea, and tracked west-northwestward across Luzon, the South China Sea, and into northern Vietnam.

## **II. TRACK AND INTENSITY**

After Deanna (04W) recurved on 2 July, ridging temporarily replaced the monsoon trough across the Philippine Islands and Sea. To the east in the eastern Caroline Islands, however, weak southwesterlies persisted at low latitudes, and a weak cyclonic circulation developed. This circulation and its associated convection was first mentioned in the 070600Z Significant Tropical Weather Advisory. That night, a small mass of convection located in the eastern end of the circulation accelerated westward as a squall line. The squall's brief passage across Guam brought over a half inch of rain and winds gusting to 30 kt (15 m/sec). On 8 July, the tropical disturbance, after tracking to the south of Guam, accelerated to 19 kt (35 km/hr) and increased in organization, prompting JTWC to issue a Tropical Cyclone Formation Alert at 091100Z. The first warning followed at 091800Z as the convection increased throughout the night.

Tropical Depression 05W was upgraded to a tropical storm at 100000Z as Eli's convective buildup continued (Figure 3-05-1). Eli attained typhoon intensity at 101800Z, and peaked at 75 kt (39 m/sec) six hours later, just before making landfall on northern Luzon. Maximum sustained winds of 28 kt (14 m/sec) with gusts to 40 kt (21 m/sec) were reported by Cubi Point Naval Air Station as Eli passed 85 nm (155 km) to the north. After entering the South China Sea, the typhoon's forward motion slowed as the mid-level easterly steering flow weakened near the western end of the subtropical ridge. Eli maintained minimal typhoon intensity until it plowed into Hainan Dao on the night of 13 July. Then, as a tropical storm, Eli moved west-northwestward across the Gulf of Tonkin and dissipated over northern Vietnam on 14 July.

## **III. FORECAST PERFORMANCE**

The overall, mean track forecast errors for JTWC were 80, 138, and 157 nm (148, 256, and 291 km) at 24, 48 and 72 hours, respectively. In comparison with the other aids, these forecasts, plus the guidance provided by OTCM, showed skill when compared to CLIPER, which had mean track errors of 104, 171, and 225 nm (195, 317, and 417 km) at 24, 48 and 72 hours, respectively.

## **IV. IMPACT**

Torrential rains associated with Typhoon Eli caused mudflows in the Mount Pinatubo area on Luzon, where there were reports of three deaths. Regional civil defense authorities reported evacuating 1600 people from their homes in three central Luzon towns to escape avalanches of volcanic debris, or lahars, from Mount Pinatubo. In addition, 25 fishermen were reported missing off the east coast of Luzon.

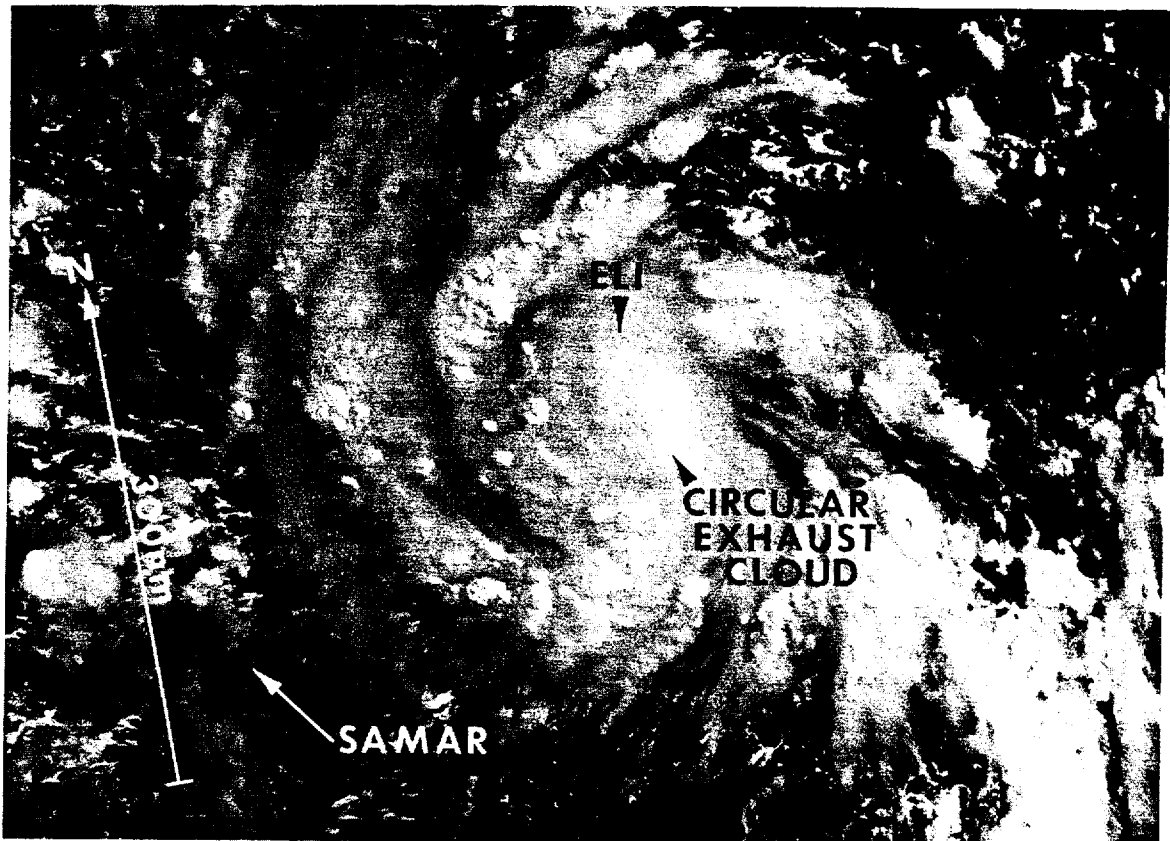


Figure 3-05-1. As Eli intensifies, a circular exhaust cloud (CEC) appears superimposed on the central dense overcast. The low angle of the sun to the east accentuates the cloud-top topography, revealing a concentric, or tree ring-like pattern of gravity waves in the top of the CEC (092354Z July DMSP visual imagery).